

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/048,241	LEE, SUK-KEUN	
	<b>Examiner</b>	<b>Art Unit</b>	
	David A Reifsnnyder	1723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communication filed on July 22, 2002.
2. ☒ The allowed claim(s) is/are 1-24 (renumbered as claims 1-7, 12-14, 8, 15, 9, 10, 11, 20-23, 16-19 and 24, respectively).
3. ☒ The drawings filed on 22 July 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|---|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>20030228</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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### REASONS FOR ALLOWANCE

The main reason for the allowance of claims 1-7, 11, 13, 14 and 15 (renumbered as claims 1-11) is the instantly claimed device for producing magnetized water, which comprises: a chamber, which houses a vessel containing purified water and whose outer wall is wound with coils of wire by a certain number of rounds; a means of supplying power, which converts alternating current of electricity into **pulsating direct current signals** and impresses said signals on said coils; a means of cooling installed outside said chamber; **a means of sensing the changes of temperature generated by said coils; a means of measuring the time spent on magnetization of said purified water; a means of controlling said means of supplying power to stop impression of said DC pulsating signals when the magnetization time measured by said means of measuring the time exceeds the preset magnetization time.**

The main reason for the allowance of claims 8-10, 12 and 20-23 (renumbered as claims 12-19) is the instantly claimed device for producing magnetized water, which comprises: a water tank containing purified water; a chamber, which is connected to said water tank and whose outer wall is wound with coils of wire by a certain number of rounds; a circulatory pump which circulates water through said water tank and said chamber; a means of supplying power which converts alternating current of electricity into **DC pulsating signals of certain frequency** and impresses them on said coils; a means of cooling installed outside said chamber a means of sensing the changes of temperature generated by said coils; **a means of measuring the time spent on**

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**magnetizing said purified water; a means of controlling said means of supplying power to stop impression of said DC pulsating signals when the magnetization time measured by said means of measuring the time exceeds the preset magnetization time; and a means of discharging water in said water to the outside.**

The main reason for the allowance of claims 16-19 (renumbered as claims 20-23) is the instantly claimed method for producing magnetized water, which comprises impressing **pulsating magnetism of a certain intensity and frequency onto purified water contained in a tightly closed vessel, and continuing said impression so far as the spin alignment of molecules of water can persist with almost no change, thus making said water molecules to form clusters, and thereby obtaining enriched magnetized water.**

The main reason for the allowance of claims 24 is the instantly claimed device for producing magnetized water, comprising: a chamber configured to house a vessel of purified water, the chamber comprising an outer wall wound by a number of rounds with coils of wire; a power supply coupled to said chamber, the power supply configured to convert alternating current into **pulsating direct current** signals and impress the direct current signals on to the coils of wire; a cooling source configured to cool the coils of wire; a temperature sensor configured to sense changes in temperature of the chamber; **a timer configured to measure time of magnetization of the purified water, and a controller; wherein the controller is configured to stop impression of the signals on the coils by the power supply when the time of magnetization of the purified water reaches a preset magnetization time.**

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Garrett et al. who discloses a magnetic fluid treating device for preventing scale in a pipe through the use of a pulsating DC magnetic field, the pulsating DC magnetic field being created by converting AC current to the pulsating DC magnetic field.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnnyder whose telephone number is (571) 271-1145. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*David A Reifsnyder*  
David A Reifsnyder  
Primary Examiner  
Art Unit 1723

DAR